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10/533290
JC17 Rec'd PCT/PTO 29 APR 2005

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agcccctaag ctctgatct atgctgcac cactttgcaa tcaggggtcc catctcggtt 600
cagtggcagt ggatctggga cagatttcac tctcaccatc agcagcctac agcctgaaga 660
tggtgcaact tattactgtc aaaggtataa ccgtgcaccg tatacttttg gccaggggac 720
caaggtggaa atcaaataag ctt 743

<210> 55
<211> 44
<212> DNA
<213> Homo sapiens

<400> 55
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<210> 56
<211> 758
<212> DNA

<213> Homo sapiens

<400> 56

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atgcactggg tccggcaagc tccaggggaag ggcctggaat gggctctcagc tatcacttgg      180
aatagtgggt acatagacta tgccgactct gtggagggcc gattcaccat ctccagagac      240
aacgccaaga actccctgta tctgcaaata aacagtctga gagctgagga tacggccgta      300
tattactgtg cgaaagtctc gtaccttagc accgcgtcct cccttgacta ttggggccaa      360
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cagagtcacc atcacttgtc gggcaagtca gggcatcaga aattacttag cctggtatca      540
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ggtagccatct cggttcagtg gcagtggatc tgggacagat ttcactctca ccatcagcag      660
cctacagcct gaagatgttg caacttatta ctgtcaaagg tataaccgtg caccgtatac      720
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<210> 57

<211> 38

<212> DNA

<213> Homo sapiens

<400> 57

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<210> 58

<211> 18

<212> DNA

<213> Homo sapiens

<400> 58

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catgcaggta cccagcag                                18

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<210> 59

<211> 18

<212> DNA

<213> Homo sapiens

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<210> 60

<211> 32

<212> DNA

<213> Homo sapiens

<400> 60

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<210> 61

<211> 354
<212> DNA
<213> Homo sapiens

<400> 61
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cccgaagagc agtactggga tctctgctg ggtacctgca tgcctgcaa aaccatttgc 180
aaccatcaga gccagcgcac ctgtgcagcc ttctgcaggt cactcagctg ccgcaaggag 240
caaggcaagt tctatgacca tctctgagg gactgcatca gctgtgcctc catctgtgga 300
cagcacccta agcaatgtgc atacttctgt gagaacaagc tcaggagcgg tacc 354

<210> 62
<211> 31
<212> DNA
<213> Homo sapiens

<400> 62
cggcacggta ccaaggttca ctgggctcct g 31

<210> 63
<211> 366
<212> DNA
<213> Homo sapiens

<400> 63
agatctatcg agggtaggat gaggggcctg ggccggagca ggcgaggtgg ccggagccgt 60
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cccgaagagc agtactggga tctctgctg ggtacctgca tgcctgcaa aaccatttgc 180
aaccatcaga gccagcgcac ctgtgcagcc ttctgcaggt cactcagctg ccgcaaggag 240
caaggcaagt tctatgacca tctctgagg gactgcatca gctgtgcctc catctgtgga 300
cagcacccta agcaatgtgc atacttctgt gagaacaagc tcaggagccc agtgaacctt 360
ggtacc 366

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<211> 31
<212> DNA
<213> Homo sapiens

<400> 64
cggcacggta cctccactcc gctgtctcct g 31

<210> 65
<211> 396
<212> DNA
<213> Homo sapiens

<400> 65
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cccgaagagc agtactggga tcctctgctg ggtacctgca tgtcctgcaa aaccatttgc 180
aaccatcaga gccagcgcac ctgtgcagcc ttctgcaggt cactcagctg ccgcaaggag 240
caaggcaagt tctatgacca tctcctgagg gactgcatca gctgtgcctc catctgtgga 300
cagcacccta agcaatgtgc atacttctgt gagaacaagc tcaggagccc agtgaacctt 360
ccaccagagc tcaggagaca gcgagtgga ggtacc 396

<210> 66
<211> 36
<212> DNA
<213> Homo sapiens

<400> 66
cggcacggta ccagggtca acagacttaa caaaag 36

<210> 67
<211> 426
<212> DNA
<213> Homo sapiens

<400> 67
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cagcacccta agcaatgtgc atacttctgt gagaacaagc tcaggagccc agtgaacctt 360
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ggtacc 426

<210> 68
<211> 31
<212> DNA
<213> Homo sapiens

<400> 68
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<210> 69
<211> 519
<212> DNA
<213> Homo sapiens

<400> 69
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aaccatcaga gccagcgcac ctgtgcagcc ttctgcaggt cactcagctg ccgcaaggag 240
caaggcaagt tctatgacca tctcctgagg gactgcatca gctgtgcctc catctgtgga 300

cagcacccta agcaatgtgc atacttctgt gagaacaagc tcaggagccc agtgaacctt 360
ccaccagagc tcaggagaca gcggagtgga gaagttgaaa acaattcaga caactcggga 420
aggtaccaag gattggagca cagaggctca gaagcaagtc cagctctccc ggggctgaag 480
ctgagtgcag atcaggtggc cctggtctac agcgggtacc 519

<210> 70
<211> 41
<212> DNA
<213> Homo sapiens

<400> 70
ggccagggat ccatcgaggg taggggggag caagcgccag g 41

<210> 71
<211> 31
<212> DNA
<213> Homo sapiens

<400> 71
cgggtgcggta ccggggccaaa gcagccggaa g 31

<210> 72
<211> 186
<212> DNA
<213> Homo sapiens

<400> 72
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agcgacttct gcctgggctg cgctgcagca cctcctgccc ccttcgggct gctttggccc 180
ggtacc 186

<210> 73
<211> 41
<212> DNA
<213> Homo sapiens

<400> 73
ggccagggat ccatcgaggg taggatgagg cgagggcccc g 41

<210> 74
<211> 28
<212> DNA
<213> Homo sapiens

<400> 74
cgggtgcggta ccgagcagcc cgggcagg 28

<210> 75
<211> 258
<212> DNA
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<400> 75

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 cccgggctgc tcggtacc 258

<210> 76
 <211> 235
 <212> PRT
 <213> Homo sapiens

<400> 76

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Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln Thr Ala Gln Met Cys Cys
 20 25 30

Ser Lys Cys Ser Pro Gly Gln His Ala Lys Val Phe Cys Thr Lys Thr
 35 40 45

Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr Gln Leu
 50 55 60

Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys Ser Ser
 65 70 75 80

Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg Ile Cys
 85 90 95

Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu Gly Cys
 100 105 110

Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg Pro Gly Phe Gly Val Ala
 115 120 125

Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys Ala Pro
 130 135 140

Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr Asp Ile Cys Arg Pro His
 145 150 155 160

Gln Ile Cys Asn Val Val Ala Ile Pro Gly Asn Ala Ser Met Asp Ala
 165 170 175

Val Cys Thr Ser Thr Ser Pro Thr Arg Ser Met Ala Pro Gly Ala Val
 180 185 190

His Leu Pro Gln Pro Val Ser Thr Arg Ser Gln His Thr Gln Pro Thr

195

200

205

Pro Glu Pro Ser Thr Ala Pro Ser Thr Ser Phe Leu Leu Pro Met Gly
 210 215 220

Pro Ser Pro Pro Ala Glu Gly Ser Thr Gly Asp
 225 230 235

<210> 77
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 77

Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr Ala Pro Glu Pro Gly Ser
 1 5 10 15

Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln Thr Ala Gln Met Cys Cys
 20 25 30

Ser Lys Cys Ser Pro Gly Gln His Ala Lys Val Phe Cys Thr Lys Thr
 35 40 45

Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr Gln Leu
 50 55 60

Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys Ser Ser
 65 70 75 80

Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg Ile Cys
 85 90 95

Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu Gly Cys
 100 105 110

Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg Pro Gly Phe Gly Val Ala
 115 120 125

Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys Ala Pro
 130 135 140

Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr Asp Ile Cys Arg Pro His
 145 150 155 160

Gln Ile Cys Asn Val Val Ala Ile Pro Gly Asn Ala Ser Met Asp Ala
 165 170 175

Val Cys Thr Ser Thr Ser Pro Thr Arg
 180 185

<210> 78

<211> 163
 <212> PRT
 <213> Homo sapiens

<400> 78

Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr Ala Pro Glu Pro Gly Ser
 1 5 10 15

Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln Thr Ala Gln Met Cys Cys
 20 25 30

Ser Lys Cys Ser Pro Gly Gln His Ala Lys Val Phe Cys Thr Lys Thr
 35 40 45

Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr Gln Leu
 50 55 60

Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys Ser Ser
 65 70 75 80

Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg Ile Cys
 85 90 95

Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu Gly Cys
 100 105 110

Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg Pro Gly Phe Gly Val Ala
 115 120 125

Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys Ala Pro
 130 135 140

Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr Asp Ile Cys Arg Pro His
 145 150 155 160

Gln Ile Cys

<210> 79
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 79

Leu Pro Ala Gln Val Ala Phe Thr Pro Tyr Ala Pro Glu Pro Gly Ser
 1 5 10 15

Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln Thr Ala Gln Met Cys Cys
 20 25 30

Ser Lys Cys Ser Pro Gly Gln His Ala Lys Val Phe Cys Thr Lys Thr
 35 40 45

Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr Gln Leu
50 55 60

Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys Ser Ser
65 70 75 80

Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg Ile Cys
85 90 95

Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu Gly Cys
100 105 110

Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg Pro Gly Phe Gly Val Ala
115 120 125

Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys
130 135 140

<210> 80
<211> 157
<212> PRT
<213> Homo sapiens

<400> 80

Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His Val
1 5 10 15

Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg
20 25 30

Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu
35 40 45

Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu Phe
50 55 60

Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile
65 70 75 80

Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala
85 90 95

Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys
100 105 110

Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys
115 120 125

Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe
130 135 140

Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
 145 150 155

<210> 81
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 81

Glu Pro Pro Thr Gln Lys Pro Lys Lys Leu Val Asn Ala Lys Lys Asp
 1 5 10 15

Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys Ser Arg Leu Asp Thr
 20 25 30

Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln Gln Ala Leu Gln Thr
 35 40 45

Val Cys Leu
 50

<210> 82
 <211> 39
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide primer

<400> 82
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39

<210> 83
 <211> 33
 <212> DNA
 <213> Artificial

<220>
 <223> oligonucleotide primer

<400> 83
 caccacggta ccgatctggt ggggcctgca aat

33

<210> 84
 <211> 738
 <212> DNA
 <213> Artificial

<220>
 <223> AD1D4-I162-tripB

<400> 84
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 cggctcagag aatactatga ccagacagct cagatgtgct gcagcaaatg ctcgccgggc 120
 caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180

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agcacataca cccagctctg gaactgggtt cccgagtgtg tgagctgtgg ctcccgtgtg 240
agctctgacc aggtggaaac tcaagcctgc actcgggaac agaaccgcat ctgcacctgc 300
aggccccggt ggtactgcgc gctgagcaag caggaggggt gccggctgtg cgcgccgctg 360
cgcaagtgcc gcccgggctt cggcgtggcc agaccaggaa ctgaaacatc agacgtggtg 420
tgcaagccct gtgccccggg gacgttctcc aacacgactt catccacgga tatttgcagg 480
ccccaccaga tcggtaccga gccaccaacc cagaagccca agaagattgt aaatgccaa 540
aaagatgttg tgaacacaaa gatgtttgag gagctcaaga gccgtctgga caccctggcc 600
caggaggtgg ccctgctgaa ggagcagcag gccctgcaga cggctctcct gaagggtcta 660
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cattgaaagc tgaattcc 738

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<210> 85
<211> 51
<212> DNA
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<220>
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<400> 85
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<210> 86
<211> 810
<212> DNA
<213> Artificial

<220>
<223> AD1D4-GSS-tripB

<400> 86
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cggctcagag aatactatga ccagacagct cagatgtgct gcagcaaatg ctgcggggc 120
caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180
agcacataca cccagctctg gaactgggtt cccgagtgtg tgagctgtgg ctcccgtgtg 240
agctctgacc aggtggaaac tcaagcctgc actcgggaac agaaccgcat ctgcacctgc 300
aggccccggt ggtactgcgc gctgagcaag caggaggggt gccggctgtg cgcgccgctg 360
cgcaagtgcc gcccgggctt cggcgtggcc agaccaggaa ctgaaacatc agacgtggtg 420
tgcaagccct gtgccccggg gacgttctcc aacacgactt catccacgga tatttgcagg 480
ccccaccaga tctgtaacgt ggtggccatc cctgggaatg caagcatgga tgcagtctgc 540
acgtccacgt cctccggttc ctccggtacc gagccaccaa cccagaagcc caagaagatt 600
gtaaatgcc aagaagatgt tgtgaacaca aagatgtttg aggagctcaa gagccgtctg 660
gacaccctgg cccaggaggt ggccctgctg aaggagcagc aggcctgca gacggtctcc 720

ctgaaggggtc tagaacaaaa actcatctca gaagaggatc tgaatagcgc cgtcgaccat 780
catcatcatc atcattgaaa gctgaattcc 810

<210> 87
<211> 39
<212> DNA
<213> Artificial

<220>
<223> oligonucleotide primer

<400> 87
agatttggtgta ccgtcgccag tgctcccttc agctggggg 39

<210> 88
<211> 957
<212> DNA
<213> Artificial

<220>
<223> AD1D4-D235-tripB

<400> 88
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cggctcagag aatactatga ccagacagct cagatgtgct gcagcaaatg ctcgccgggc 120
caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180
agcacatata ccagctctg gaactgggtt cccgagtgtg tgagtgtgg ctcccgtgt 240
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ccccaccaga tctgtaacgt ggtggccatc cctgggaatg caagcatgga tgcagtctgc 540
acgtccacgt cccccaccg gagtatggcc ccaggggcag tacacttacc ccagccagtg 600
tccacacgat cccaacacac gcagccaact ccagaacca gcactgctcc aagcacctcc 660
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gagcagcagg ccctgcagac ggtctccctg aagggtctag aacaaaaact catctcagaa 900
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<210> 89
<211> 711
<212> DNA
<213> Artificial

<220>
<223> AD1D4-I162-I10-TripB

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caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180
agcacataca cccagctctg gaactgggtt cccgagtgtc tgagctgtgg ctcccgtgt 240
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cgcaagtgcc gcccggtt cggcgtggcc agaccaggaa ctgaaacatc agacgtggtg 420
tgcaagccct gtgccccggg gacgttctcc aacacgactt catccacgga tatttgcagg 480
ccccaccaga tcggtaccat tgtaaatacc aagaaagatg ttgtgaacac aaagatgttt 540
gaggagctca agagccgtct ggacaccctg gcccaggagg tggccctgct gaaggagcag 600
caggccctgc agacggtctc cctgaagggt ctagaacaaa aactcatctc agaaggagat 660
ctgaatagcg ccgtcgacca tcatcatcat catcattgaa agctgaattc c 711

<210> 90
<211> 711
<212> DNA
<213> Artificial

<220>
<223> AD1D4-GSS-I10-tripB

<400> 90
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caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180
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tgcaagccct gtgccccggg gacgttctcc aacacgactt catccacgga tatttgcagg 480
ccccaccaga tcggtaccat tgtaaatacc aagaaagatg ttgtgaacac aaagatgttt 540
gaggagctca agagccgtct ggacaccctg gcccaggagg tggccctgct gaaggagcag 600
caggccctgc agacggtctc cctgaagggt ctagaacaaa aactcatctc agaaggagat 660
ctgaatagcg ccgtcgacca tcatcatcat catcattgaa agctgaattc c 711

<210> 91
<211> 930
<212> DNA
<213> Artificial

<220>
<223> AD1D4-D235-I10-tripB

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cggctcagag aatactatga ccagacagct cagatgtgct gcagcaaata ctgcggggc 120
caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180
agcacatata ccagctctg gaactgggtt cccgagtgtg tgagctgtgg cccccgtgt 240
agctctgacc aggtggaaac tcaagcctgc actcgggaac agaaccgcat ctgcacctgc 300
aggcccggct ggtactgcgc gctgagcaag caggaggggt gccggctgtg cgcgccgctg 360
cgcaagtgcc gcccgggctt cggcgtggcc agaccaggaa ctgaaacatc agacgtggtg 420
tgcaagccct gtgccccggg gacgttctcc aacacgactt catccacgga tatttgagg 480
ccccaccaga tctgtaacgt ggtggccatc cctgggaatg caagcatgga tgcagtctgc 540
acgtccacgt cccccaccg gagtatggcc ccaggggcag tacacttacc ccagccagtg 600
tccacacgat cccaacacac gcagccaact ccagaaccca gcaactgtcc aagcacctcc 660
ttcctgtctc caatggggcc cagcccccca gctgaaggga gcaactggcg cgggtaccatt 720
gtaaatgcca agaaagatgt tgtgaacaca aagatgtttg aggagctcaa gagccgtctg 780
gacaccctgg ccagggaggt ggcctgtctg aaggagcagc aggcctgca gacggtctcc 840
ctgaagggtc tagaacaaaa actcatctca gaagaggatc tgaatagcgc cgtcgaccat 900
catcatcatc atcattgaaa gctgaattcc 930

<210> 92
<211> 31
<212> DNA
<213> Artificial

<220>
<223> pKpnI-V17

<400> 92
gacggtaccg ttgtgaacac aaagatgttt g 31

<210> 93
<211> 35
<212> DNA
<213> Artificial

<220>
<223> pBAD6H

<400> 93
ggctcggaat tcaatgatga tgatgatgat ggctcg 35

<210> 94
<211> 762
<212> DNA
<213> Artificial

<220>
<223> AD1D4-GSS-V17-tripB

<400> 94
 atgggatcca tggcccaggt ggcatttaca ccctacgccc cggagcccgg gagcacatgc 60
 cggctcagag aatactatga ccagacagct cagatgtgct gcagcaaag ctgcgcgggc 120
 caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180
 agcacatata ccagctctg gaactgggtt cccgagtgtc tgagctgtgg ctcccgtgt 240
 agctctgacc aggtggaaac tcaagcctgc actcgggaac agaaccgcat ctgcacctgc 300
 aggcccggct ggtactgcgc gctgagcaag caggaggggt gccggctgtg cgcgccgtg 360
 cgcaagtgcc gcccggtt cggcgtggcc agaccaggaa ctgaaacatc agacgtggtg 420
 tgcaagccct gtgccccggg gacgttctcc aacacgactt catccacgga tatttgcagg 480
 cccaccaga tctgtaacgt ggtggccatc cctgggaatg caagcatgga tgcagtctgc 540
 acgtccacgt cctccggttc ctccggtacc gttgtgaaca caaagatgtt tgaggagctc 600
 aagagccgtc tggacacctt ggcccaggag gtggccctgc tgaaggagca gcaggccctg 660
 cagacggtct ccctgaagg tctagaacaa aaactcatct cagaagagga tctgaatagc 720
 gccgtcgacc atcatcatca tcatcattga aagctgaatt cc 762

<210> 95
 <211> 909
 <212> DNA
 <213> Artificial

<220>
 <223> AD1D4-D235-V17-tripB

<400> 95
 atgggatcca tggcccaggt ggcatttaca ccctacgccc cggagcccgg gagcacatgc 60
 cggctcagag aatactatga ccagacagct cagatgtgct gcagcaaag ctgcgcgggc 120
 caacatgcaa aagtcttctg taccaagacc tcggacaccg tgtgtgactc ctgtgaggac 180
 agcacatata ccagctctg gaactgggtt cccgagtgtc tgagctgtgg ctcccgtgt 240
 agctctgacc aggtggaaac tcaagcctgc actcgggaac agaaccgcat ctgcacctgc 300
 aggcccggct ggtactgcgc gctgagcaag caggaggggt gccggctgtg cgcgccgtg 360
 cgcaagtgcc gcccggtt cggcgtggcc agaccaggaa ctgaaacatc agacgtggtg 420
 tgcaagccct gtgccccggg gacgttctcc aacacgactt catccacgga tatttgcagg 480
 cccaccaga tctgtaacgt ggtggccatc cctgggaatg caagcatgga tgcagtctgc 540
 acgtccacgt ccccccaccg gagtatggcc ccaggggcag tacacttacc ccagccagt 600
 tccacacgat cccaacacac gcagccaact ccagaaccca gcaactgtcc aagcacctcc 660
 ttctgtctcc caatgggccc cagcccccca gctgaagga gcaactggca cgggtaccgtt 720
 gtgaacacaa agatgtttga ggagctcaag agcgtctgg acaccctggc ccaggaggtg 780
 gccctgctga aggagcagca ggccctgcag acggtctccc tgaagggtct agaacaaaaa 840
 ctcctctcag aagaggatct gaatagcgcc gtcgaccatc atcatcatca tcattgaaag 900

ctgaattcc

909

<210> 96
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 96

Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val Asn Ala Lys Lys Asp
 1 5 10 15

Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys Ser Arg Leu Asp Thr
 20 25 30

Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln Gln Ala Leu Gln Thr
 35 40 45

Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys Phe Leu Ala Phe
 50 55 60

Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp Cys Ile Ser Arg
 65 70 75 80

Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu Asn Asp Ala Leu
 85 90 95

Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala Glu Ile Trp Leu
 100 105 110

Gly Leu Asn Asp Met Ala Ala Glu Gly Thr Trp Val Asp Met Thr Gly
 115 120 125

Ala Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile Thr Ala Gln Pro
 130 135 140

Asp Gly Gly Lys Thr Glu Asn Cys Ala Val Leu Ser Gly Ala Ala Asn
 145 150 155 160

Gly Lys Trp Phe Asp Lys Arg Cys Arg Asp Gln Leu Pro Tyr Ile Cys
 165 170 175

Gln Phe Gly Ile Val
 180

<210> 97
 <211> 137
 <212> PRT
 <213> Homo sapiens

<400> 97

Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys
 1 5 10 15

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<220>
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<400> 98
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accgcgcatcg cctacaagaa ctgggagact gagatcaccg cg 102

<210> 99
<211> 94
<212> DNA
<213> Artificial

<220>
<223> TN-lib2-tprev

<220>
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<223> randomised

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<223> randomised

<220>
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<222> (20)..(21)
<223> randomised

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<222> (23)..(24)
<223> randomised

<220>
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<223> randomised

<220>
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<222> (30)..(30)
<223> randomised

<220>
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<222> (32)..(33)
<223> randomised

<400> 99
gctgggcctc aacgacnnsn nsnnsgagnn snnstgggtg gacatgaccg gtacccgcat 60
cgcctacaag aactgggaga ctgagatcac cgcg 94

<210> 100
<211> 108
<212> DNA
<213> Artificial

<220>
<223> TN-lib3-tpfo

<220>
<221> misc_feature
<222> (63)..(64)
<223> randomised

<220>
<221> misc_feature
<222> (66)..(67)
<223> randomised

<220>
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<222> (69)..(70)
<223> randomised

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<222> (72)..(73)
<223> randomised

<220>
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<222> (75)..(76)
<223> randomised

<220>
<221> misc_feature
<222> (78)..(79)
<223> randomised

<400> 100
cgcggcagcg cttgtcgaac cacttgccgt tggccgcgcc tgacaggacc gcgcagttct 60
csnnsnnsnn snnsnnsna tcgggttgcg cggtgatctc agtctccc 108

<210> 101
<211> 102
<212> DNA
<213> Artificial

<220>
 <223> TN-lib2-tpfo

<220>
 <221> misc_feature
 <222> (63)..(64)
 <223> randomised

<220>
 <221> misc_feature
 <222> (66)..(67)
 <223> randomised

<220>
 <221> misc_feature
 <222> (69)..(70)
 <223> randomised

<220>
 <221> misc_feature
 <222> (72)..(73)
 <223> randomised

<400> 101
 cgcggcagcg cttgtcgaa cacttgccgt tggccgcgcc tgacaggacc gcgcagttct 60
 csnnnsnnnn snnatcggtg tgcgcggtga tctcagtcctc cc 102

<210> 102
 <211> 137
 <212> PRT
 <213> Artificial

<220>
 <223> TN3-2

<400> 102

Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys
 1 5 10 15

Phe Leu Ala Phe Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp
 20 25 30

Cys Ile Ser Arg Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu
 35 40 45

Asn Asp Ala Leu Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala
 50 55 60

Glu Ile Trp Leu Gly Leu Asn Lys Val Arg Ser Arg Tyr Phe Trp Met
 65 70 75 80

Asp Met Thr Gly Thr Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile
 85 90 95

Thr Ala Gln Pro Asp Pro Arg His Thr Glu Asn Cys Ala Val Leu Ser
100 105 110

Gly Ala Ala Asn Gly Lys Trp Phe Asp Lys Arg Cys Arg Asp Gln Leu
115 120 125

Pro Tyr Ile Cys Gln Phe Gly Ile Val
130 135

<210> 103
<211> 137
<212> PRT
<213> Artificial

<220>
<223> TN3-2-B

<400> 103

Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys
1 5 10 15

Phe Leu Ala Phe Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp
20 25 30

Cys Ile Ser Arg Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu
35 40 45

Asn Asp Ala Leu Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala
50 55 60

Glu Ile Trp Leu Gly Leu Asn Lys Val Arg Ser Arg Tyr Phe Trp Met
65 70 75 80

Asp Met Thr Gly Thr Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile
85 90 95

Thr Ala Gln Pro Asp Pro Thr Asn Asn Glu Asn Cys Ala Val Leu Ser
100 105 110

Gly Ala Ala Asn Gly Lys Trp Phe Gly Lys Arg Cys Arg Asp Gln Leu
115 120 125

Pro Tyr Ile Cys Gln Phe Gly Ile Val
130 135

<210> 104
<211> 137
<212> PRT
<213> Artificial

<220>
<223> TN3-2-C

<400> 104

Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys
1 5 10 15

Phe Leu Ala Phe Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp
20 25 30

Cys Ile Ser Arg Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu
35 40 45

Asn Asp Ala Leu Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala
50 55 60

Glu Ile Trp Leu Gly Leu Asn Lys Val Arg Ser Arg Tyr Phe Trp Val
65 70 75 80

Asp Met Thr Gly Thr Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile
85 90 95

Thr Ala Gln Pro Asp Pro Thr Asn Arg Glu Asn Cys Ala Val Leu Ser
100 105 110

Gly Ala Ala Asn Gly Lys Trp Phe Asp Lys Arg Cys Arg Asp Gln Leu
115 120 125

Pro Tyr Ile Cys Gln Phe Gly Ile Val
130 135

<210> 105
<211> 137
<212> PRT
<213> Artificial

<220>
<223> TN3-2-D

<400> 105

Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys
1 5 10 15

Phe Leu Ala Phe Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp
20 25 30

Cys Ile Ser Arg Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu
35 40 45

Asn Asp Ala Leu Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala
50 55 60

Glu Ile Trp Leu Gly Leu Asn Lys Val Arg Ser Arg Tyr Phe Trp Ile
65 70 75 80

Asp Met Thr Gly Thr Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile
85 90 95

Thr Ala Gln Pro Asp Pro Asn Asn Arg Glu Asn Cys Ala Val Leu Ser
100 105 110

Gly Ala Ala Asn Gly Lys Trp Phe Gly Lys Arg Cys Arg Asp Gln Leu
115 120 125

Pro Tyr Ile Cys Gln Phe Gly Ile Val
130 135

<210> 106
<211> 181
<212> PRT
<213> Artificial

<220>
<223> TN-2-B

<400> 106

Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val Asn Ala Lys Lys Asp
1 5 10 15

Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys Ser Arg Leu Asp Thr
20 25 30

Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln Gln Ala Leu Gln Thr
35 40 45

Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys Phe Leu Ala Phe
50 55 60

Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp Cys Ile Ser Arg
65 70 75 80

Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu Asn Asp Ala Leu
85 90 95

Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala Glu Ile Trp Leu
100 105 110

Gly Leu Asn Lys Val Arg Ser Arg Tyr Phe Trp Met Asp Met Thr Gly
115 120 125

Thr Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile Thr Ala Gln Pro
130 135 140

Asp Pro Thr Asn Asn Glu Asn Cys Ala Val Leu Ser Gly Ala Ala Asn
145 150 155 160

Gly Lys Trp Phe Gly Lys Arg Cys Arg Asp Gln Leu Pro Tyr Ile Cys

165

170

175

Gln Phe Gly Ile Val
180

<210> 107
<211> 181
<212> PRT
<213> Artificial

<220>
<223> TN-2-D

<400> 107

Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val Asn Ala Lys Lys Asp
1 5 10 15

Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys Ser Arg Leu Asp Thr
20 25 30

Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln Gln Ala Leu Gln Thr
35 40 45

Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys Phe Leu Ala Phe
50 55 60

Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp Cys Ile Ser Arg
65 70 75 80

Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu Asn Asp Ala Leu
85 90 95

Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala Glu Ile Trp Leu
100 105 110

Gly Leu Asn Lys Val Arg Ser Arg Tyr Phe Trp Ile Asp Met Thr Gly
115 120 125

Thr Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile Thr Ala Gln Pro
130 135 140

Asp Pro Asn Asn Arg Glu Asn Cys Ala Val Leu Ser Gly Ala Ala Asn
145 150 155 160

Gly Lys Trp Phe Gly Lys Arg Cys Arg Asp Gln Leu Pro Tyr Ile Cys
165 170 175

Gln Phe Gly Ile Val
180

<210> 108
<211> 181

<212> PRT
<213> Artificial

<220>
<223> TN-2-C

<400> 108

Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val Asn Ala Lys Lys Asp
1 5 10 15

Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys Ser Arg Leu Asp Thr
20 25 30

Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln Gln Ala Leu Gln Thr
35 40 45

Val Cys Leu Lys Gly Thr Lys Val His Met Lys Cys Phe Leu Ala Phe
50 55 60

Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu Asp Cys Ile Ser Arg
65 70 75 80

Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu Asn Asp Ala Leu
85 90 95

Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu Ala Glu Ile Trp Leu
100 105 110

Gly Leu Asn Lys Val Arg Ser Arg Tyr Phe Trp Val Asp Met Thr Gly
115 120 125

Thr Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu Ile Thr Ala Gln Pro
130 135 140

Asp Pro Thr Asn Arg Glu Asn Cys Ala Val Leu Ser Gly Ala Ala Asn
145 150 155 160

Gly Lys Trp Phe Asp Lys Arg Cys Arg Asp Gln Leu Pro Tyr Ile Cys
165 170 175

Gln Phe Gly Ile Val
180

<210> 109
<211> 256
<212> PRT
<213> Artificial

<220>
<223> AD1D4-GSS-I10

<400> 109

Met Gly Ser Met Ala Gln Val Ala Phe Thr Pro Tyr Ala Pro Glu Pro

1 5 10 15

Gly Ser Thr Cys Arg Leu Arg Glu Tyr Tyr Asp Gln Thr Ala Gln Met
 20 25 30

Cys Cys Ser Lys Cys Ser Pro Gly Gln His Ala Lys Val Phe Cys Thr
 35 40 45

Lys Thr Ser Asp Thr Val Cys Asp Ser Cys Glu Asp Ser Thr Tyr Thr
 50 55 60

Gln Leu Trp Asn Trp Val Pro Glu Cys Leu Ser Cys Gly Ser Arg Cys
65 70 75 80

Ser Ser Asp Gln Val Glu Thr Gln Ala Cys Thr Arg Glu Gln Asn Arg
 85 90 95

Ile Cys Thr Cys Arg Pro Gly Trp Tyr Cys Ala Leu Ser Lys Gln Glu
 100 105 110

Gly Cys Arg Leu Cys Ala Pro Leu Arg Lys Cys Arg Pro Gly Phe Gly
 115 120 125

Val Ala Arg Pro Gly Thr Glu Thr Ser Asp Val Val Cys Lys Pro Cys
130 135 140

Ala Pro Gly Thr Phe Ser Asn Thr Thr Ser Ser Thr Asp Ile Cys Arg
145 150 155 160

Pro His Gln Ile Cys Asn Val Val Ala Ile Pro Gly Asn Ala Ser Met
 165 170 175

Asp Ala Val Cys Thr Ser Thr Ser Ser Gly Ser Ser Gly Thr Ile Val
 180 185 190

Asn Ala Lys Lys Asp Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys
195 200 205

Ser Arg Leu Asp Thr Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln
210 215 220

Gln Ala Leu Gln Thr Val Ser Leu Lys Gly Leu Glu Gln Lys Leu Ile
225 230 235 240

Ser Glu Glu Asp Leu Asn Ser Ala Val Asp His His His His His His
 245 250 255